

A.A.A.S. BULLETIN

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Message from President Compton

Science in 1942 is at the service of a world at war. As loyal citizens, members of the American Association for the Advancement of Science are actively sharing the fight to establish a world in which men are free to seek the truth and to shape their lives in accord with their understanding of the truth.

Through technology, science is building a new society which is complex in organization and world-wide in extent. This society consists of specialists. Its survival depends upon their co-operation. Yet the will to cooperate is the antithesis of the will to hate. This means that cooperation can not long be forced, for hate and conquest breed only antagonisms. Thus the mighty forces of science work inevitably toward a united world in which men must find their own way of working together. Science would not conquer the world; it would make men free.

While science thus becomes a servant of war, its survival and growth is one of the major objectives for which we fight. As men learn the lesson of science, of the value of unbiased and diligent search for truth, may we not hope that scientific investigation may displace war as a method for solving our great human problems?

When other lights burn dim, we can take heart that the torch of science is kept alight. In the nations arrayed against us are also scientific men. In the new world to be shaped when the present turmoil ends, we can rely on them to help in bringing order out of chaos.

In the meantime we shall use our science as a powerful weapon to protect what we value, our homes, our nation, and our right to think. We shall endeavor to increase human understanding, with hope that this may bring a better

world. Such are the aims of the American Association for the Advancement of Science in time of war.—ARTHUR H. COMPTON, President.

Membership of the Association

On March 11, the total membership of the Association was 23,766, which is by far the largest in its history. Since last October 1, the beginning of the current fiscal year of the Association, 3,022 persons have been admitted as members. In no previous year have as many new members been added to the membership roll in such a short interval of time.

One of the important reasons for the rapid increase in membership is the large and increasing number of nominations that have been made by members. The secretaries of several of the sections have also sent nominations for membership to the Office of the Permanent Secretary, and they have almost invariably resulted in elections. Naturally these evidences that members from widely different fields regard membership in the Association as desirable for themselves and for their friends is gratifying, for it proves that the Association is increasing the interest of scientists in fields other than their own and promoting a feeling of solidarity among scientists as a whole.

Another reason for rising interest in the Association is the symposia volumes it has published. The twelfth in the past four years is now being bound and two more are now in the hands of the printers. It is evident that these widely circulated volumes have been recognized as important contributions to their respective fields. The non-technical series, of which two volumes have been published with a third being set in type, have also made a favorable impression. Finally, the research conferences on chemistry that are being held at Gibson Island, Md., during the summer months have contributed greatly to the reputation of the Association.

As is well known, the programs of the Association, exclusive of those of its affiliated and associated societies, are organized under sixteen sections and two subsections: A (mathematics), B (physics), C (chemistry), D (astronomy), E (geology and geography), F (zoological sci-

ences), G (botanical sciences), H (anthropology), I (psychology), K (social and economic sciences), L (historical and philological sciences), M (engineering), N (medical sciences), Nd (subsection on dentistry), Np (subsection on pharmacy), O (agriculture), P (industrial science) and Q (education).

Each member of the Association has the privilege of being enrolled as affiliated with one or more sections, his sectional affiliations indicating the fields of his principal scientific interest. The distribution of the members of the Association among the sections, as determined by their respective first choices of sectional affiliations, is given in the following table:

Section	Members	Percentage
A	828	3.5
B	1,778	7.5
C	4,530	19.1
D	311	1.3
E	1,257	5.3
F	2,882	12.2
G	1,847	7.8
H	343	1.4
I	1,264	5.3
K	460	1.9
L	159	0.7
M	1,577	6.7
N	4,101	17.2
Nd	246	1.0
Np	211	0.9
O	816	3.4
P	34	0.1
Q	627	2.6
No section	495	2.1
Total	23,766	100.0

The percentage affiliations of members with the various sections of the Association do not indicate the relative numbers of scientists in the country who are interested in the respective fields. In general, the fields in which there are strong special societies which hold meetings independently of the Association are not proportionately represented in its membership. However, the membership roll of the Association carries the names of a large percentage of the eminent scientists in the field of each of its sections.

Annual Meeting of the Pacific Division

The twenty-sixth annual meeting of the Pacific Division, American Association for the Advancement of Science, will be held in Salt Lake City, June 15 to 20, 1942. This meeting will also be the one hundred eleventh meeting of the Association. Plans for the program are

now complete, and the general sessions will consist of the following:

The Divisional Symposium on The Great Basin, with Emphasis on Glacial and Post-Glacial Times. Included in the Symposium will be papers by Eliot Blackwelder, Stanford University, "The Geological Background"; C. L. Hubbs and R. R. Miller, University of Michigan, "The Zoological Evidence"; and Ernst Antevs, Globe, Ariz., "Climatic Changes and Pre-White Man."

The session on Reviews of Current Research will consist of papers by G. E. K. Branch, University of California, on "Relationship Between Molecular Configuration and Resonance"; G. F. MacLeod, University of California, on "Recent Advances in Entomology"; C. W. Bennett, U. S. Department of Agriculture, Riverside, Calif., on "Recent Work on Virus Diseases of Plants"; and E. C. McCulloch, the State College of Washington, on "Recent Developments in the Field of Disinfection."

Evening addresses will be delivered by Professor D. R. Hoagland, President of the Pacific Division, A.A.A.S., who will speak on "Progress in Investigations of the Nutrition of Plants"; Dr. Hazel K. Stiebeling, Senior Food Economist, U. S. Department of Agriculture, Washington, D. C., whose topic will be "Nutrition in Wartime"; and Dr. C. E. K. Mees, Eastman Kodak Company, Rochester, N. Y., who will present an address on "Recent Developments in Photography."

In addition to the general sessions, there will be as usual the sessions of the affiliated societies, and the various exhibits, excursions and recreational events.

Those who plan to present papers during the meetings of the affiliated societies are urged to send their titles in to the secretary of the society in question immediately.

The AAAS-Gibson Island Research Conferences on Chemistry in 1942

This coming summer, between June 15 and August 28, ten special research conferences on chemistry will be held at Gibson Island, Md. Each conference will continue for five days, beginning on Monday morning and closing on Friday afternoon. The attendance at each conference will be limited to sixty persons, generally experts in the field of the conference. Arrangements for attending the conferences will be made with Dr. Neil E. Gordon, Director of the Conferences, Central College, Fayette, Mo.

The subjects of the ten conferences, which will be held on successive weeks beginning June 15, are as follows:

Frontiers in Petroleum Chemistry.
Catalysis.
Relation of Structure to Physiological Action.
Organic High Molecular Weight Compounds.
Structure and Chemistry of Textile Fibers.
Vitamins.
X-Ray and Electron Diffraction.
Corrosion.
Chemical Growth Promoters.
Instrumentation.

The following are the complete programs for the first three conferences; programs of the remaining conferences will be published in later issues of A.A.A.S. BULLETIN.

FRONTIERS IN PETROLEUM CHEMISTRY

Chairman: C. R. Wagner, Chief Chemist, Pure Oil Company.
Vice chairman: Robert E. Burk, Research Director, Standard Oil Company of Ohio.

June 15

New Tools in Hydrocarbon Research. W. J. Sweeney, Associate Director, Esso Laboratories.
Intramolecular Forces; Structure of Hydrocarbon Molecules. Henry Eyring, Princeton University.

June 16

Relation of Physical Properties to Chemical Constitution. S. S. Kurtz, Jr., Development Engineer, Sun Oil Company.
Role of Free Radicals in Hydrocarbon Reactions. F. O. Rice, The Johns Hopkins University.

June 17

Fundamental Principles of Catalysis. Robert E. Burk, Research Director, Standard Oil Company of Ohio.
Methods of Purifying Hydrocarbons. Beveridge James Mair, National Bureau of Standards.

June 18

Oxidation of High Molecular Weight Hydrocarbons. Arthur L. Lyman, Standard Oil Company of California.
Role of Chemistry in the Discovery and Production of Petroleum. Leslie C. Case, Gulf Oil Company.

CATALYSIS

Chairman: E. C. Williams, Director of Research, the Shell Development Company.
Vice chairman: Hugh S. Taylor, Princeton University.

June 22

Adsorption of Hydrogen on Tungsten Powder and its Meaning for the General Theory of Adsorption and Catalysis. Walter G. Frankenburg, The Johns Hopkins University.

June 23

Contributions in the Field of Adsorption as Related to Catalysis. Otto Beeck.

June 24

Adsorption-Desorption Processes in Catalysis. Stephen Brunauer, U. S. Department of Agriculture.

June 25

Biological Oxidations, Fermentations, and Phosphoglycolations. C. V. Smythe, Rockefeller Institute.

June 26

Heterogeneous Catalysis—The Basis of Life. Kenneth C. Blanchard, New York University.

RELATION OF STRUCTURE TO PHYSIOLOGICAL ACTION

Chairman: Donalee L. Tabern, Abbott Laboratories.
Vice chairman: Walter H. Hartung, University of Maryland.

June 29

Recent Advances in the Synthesis and Physiological Chemistry of Amino Acids. H. E. Carter, University of Illinois.
Amino Acids from Natural Proteins. Wendell W. Moyer, A. E. Staley Manufacturing Company.

June 30

Chemistry of the Aromatic Arsine Oxidase. G. O. Doak, George A. Breon Company.
Correlation between Structure and Biological Activity of Aromatic Arsine Oxides. Harry Eagle, U. S. Public Health Service.

July 1

Synthesis of Cyclopropyl Ethers. Sylvan Ellis Forman and Dorothy Kibler, University of Maryland.
Pharmacology of Cyclopropyl Ethers. John C. Krantz, Jr., W. E. Evans and C. J. Carr, University of Maryland.
Clinical Applications of Certain Cyclopropyl Ethers in Anesthesia. M. Kilborne.
The Monocrotaline and Related Alkaloids. Marvin Carmack, University of Michigan.

July 2

Recent Progress in the Knowledge of Complement and its Function in Immunity. Michael Heidelberger, Columbia University.
Preparation of Blood Substitutes and Other Biological Materials by Desiccation from the Frozen State. Earl W. Florsdorf, University of Pennsylvania.

July 3

Physiology of Anticonvulsant Drugs. Tracy J. Putman and H. Houston Merritt, Harvard Medical School.
Chemistry of Anticonvulsant Drugs. W. G. Bywater and Oliver Kamm, Parke, Davis and Company.
Metabolism and Excretion of Hydantoins. F. L. Kozelka, Wisconsin General Hospital.

The dates on which the seven remaining conferences will begin are, respectively, July 6, 13, 20 and 27, and August 3, 17, and 24.

Nutrition Experiment in Organized Labor

The Office of Defense Health and Welfare Services is devoting special attention to nutrition work in the ranks of labor. The reasons for this emphasis are not difficult to see. Labor is our army of production. Its health and morale depend in considerable part upon its nutrition, and in turn, depends upon sound food habits and intelligent understanding of the exigencies of the moment and cooperation with governmental action.

The experiences in Worcester, Mass., an industrial city with a population of 200,000, will give some notion of the mode of approach that is being employed. Local Congress of Industrial Organizations and American Federation of Labor city councils were approached for participation in the nutrition program. After their important role in it was made clear to them, each organization appointed a delegation which constituted itself as the Congress of Industrial Organizations and American Federation of Labor labor nutrition committees, respectively. These delegates elected representatives to the city committee, whose task it is to coordinate all nutritional education within the city. This committee consists of nutritionists, as well as representatives of all major civic groups such as the Red Cross, business, labor, Parent-Teacher Association, Board of Education, welfare organizations, etc. It supplies technical aid in the form of lectures, films, and demonstrations on nutrition; it coordinates the various parts of the work and determines policies, emphasis or scope. The labor representatives on this committee form a link between it and the nutritional activities within the ranks of organized labor. Decisions and instructions are brought back by them to the labor nutrition committees which canalize the information to the individual members of the labor organizations.

Nutrition subcommittees are set up in each local of every union. They consist of three women and a scientific adviser who assists them. No separate nutrition meetings are held, but about thirty minutes are set aside at regular union membership meetings for nutrition education. This time may be devoted to a lecture, film or demonstration, or to an informal conversation. It is fully realized that many women can make a very real contribution to society in their own homes and kitchens. They welcome help in making their contributions as practical and as effective as possible. To aid them in their food planning, union women are asked to submit monthly or weekly budget sheets, stating the

type of food bought, expenditures, method of preparation, etc. The committee then discusses these statements from all viewpoints and makes recommendations. Nutrition talks are thus made practical and direct. These discussions are also linked with consideration of prices, rationing, choice of foods, as well as with basic scientific facts on nutrition.

Members are urged to attend regular nutrition courses which should award them certificates. It has been found desirable for each union to issue what are called scholarships to all women who are interested in attending such courses.

Clearly, the increased demand this work in labor groups places on scientific aid necessitates a large mobilization of scientists. Since nutrition is applied biochemistry, it is essential that the chemists, biologists, and even physicians who volunteer take some refresher course to prepare themselves for these tasks. Conversely, nutritionists, as well as the other scientific volunteers, must also sharpen their social outlook, the better to cooperate with the various groups of society in this common effort. We must avail ourselves of the cooperative spirit of the war effort to introduce scientific food habits into our folklore, not only for the war period but for the indefinite future.—DR. MARK GRAUBARD, Office of Defense Health and Welfare Services.

Results of a Test Vote

Early in March a circular letter was sent from the Office of the Permanent Secretary to 500 of the members of the Association who receive *The Scientific Monthly* but not *Science*. This letter was written for a special purpose and it brought many interesting replies. Those who receive *Science* get rather comprehensive statistical reports of the meetings of the Association, usually consisting of about 21,000 words which fill an issue of the journal. Those who receive *The Scientific Monthly* get briefer general descriptions of the meetings, including comments on several of their most important features.

It has been the policy of the Association to send the issues of *Science* containing reports of the meetings of the Association to all members whether or not they regularly receive this journal. Since about 37 per cent of the members regularly receive *The Scientific Monthly*, the cost of sending copies of the reports to them is considerable. If they are not desired, obviously they should be discontinued and the expense avoided. If they are desired the Association should continue to send them.

Although there are only 37 per cent of the members of the Association who receive *The Scientific Monthly* and not *Science*, it was thought a sample of 500 would give sufficient information to determine whether the Association is justified in sending these copies of *Science* to those who do not regularly receive it.

Of the 500 members to whom letters were sent, 157 replied. Of those who replied 89 desire to receive the reports of the meetings of the Association which are published in *Science*, 68 do not wish to receive them because they either have access to *Science* or are indifferent to receiving these special issues. The Office of the Permanent Secretary concludes that the reports of the meetings of the Association published in *Science* should be continued to be sent to all members.

In addition to answering the questions in the circular letter, many members made interesting comments on the work, policies and purposes of the Association. These comments, several of which follow, are varied and interesting.

I would not say that the report was of absorbing interest, but on the other hand it is the only report that I receive from the Association. Other national organizations with which I am familiar are less reticent, for example, the American Institute of Electrical Engineers. The only organizations of the magnitude of the A. A. A. S. that publish less about their activities and finances are the labor unions.—E. H. B., Illinois.

Replying to your letter, I do not care for the special numbers of *Science* containing reports of meetings. The reports in *The Scientific Monthly*, plus the individual reports which I receive from the affiliated societies to which I belong, are adequate. If I wish to read more, I can consult *Science* in the University library. I should like to venture an opinion that at the present time *The Scientific Monthly* is the best edited and the most interesting it has ever been.—C. H. A., California.

I am glad to let you know that I feel that it is decidedly worth-while to send the one special issue of *Science* each year to those members who normally receive *The Scientific Monthly*. Personally, I look forward each year to receiving this special issue, and have a file of them for a number of years back. I am interested not only in the reports on the meetings (particularly the digests of important papers) but also in the advertisements, especially the extensive displays used by the publishers of scientific books.

I have long thought that the Association could render a very beneficial service if it provided some still more comprehensive means for the membership as a whole to reap some of the benefits enjoyed by those who attended the meetings. Would it not be feasible, and well worthwhile, to have each author submit an abstract of his paper, and then to print these abstracts in groups by the Sections of the Association? Each member would indicate the section or sections in which he is interested and then the corresponding groups of abstracts would automatically be mailed to him each year. If the present general needs for curtailment make it difficult to add any new services, perhaps it would not be amiss to carefully weigh the mat-

ter and see if some such plan as this would not be more effective than some of the existing services in promptly getting valuable new findings to all of the scientists who can use them.—L. A., California.

I was very happy to receive the February 6th issue of *Science* and its detailed reports of the Dallas Meeting of the Association. I hope that you will continue this courtesy of sending these detailed reports to the readers of *The Scientific Monthly*.

I take the *Monthly* because of the type of article presented, which one might say is more or less, the philosophical or popular approach to science. As one of the lesser members of the Association, I would like to make a suggestion, which I believe is all-important at the present time. With the ever-increasing specialization on the part of the individual, and ever-increasing centralization of power in the hands of large institutions and Federal Government, it is difficult for the individual to know about the various branches of science. Even more difficult is it to integrate this knowledge in the various branches of science, as well as science with the current thought in religious fields. My suggestion is that some thought and consideration be given this problem of integration of the various branches of science and of science with religion. This integrated knowledge should be made available, not only to the members of the Association, but to the general public also. I realize that this is easier said than done, but it also appears to me that the mass of unrelated and isolated details could be cleared by some organization such as the Association which is made up of the various branches of science.—R. A., Iowa.

Glad to receive it. Why not send the issues announcing the plans for coming meetings? I have been troubled to find so little mention of them in *The Scientific Monthly*.—V. R. B., Massachusetts.

The Association from 1848 to 1860

All attempts to establish enduring national scientific societies in America resulted in failures until the founding of the American Association for the Advancement of Science in 1848. Interests other than science had been paramount.

Soon after the close of the War for Independence there began an unparalleled territorial expansion of the United States. In 1803 there was the Louisiana Purchase; in 1819, the treaty with Spain; in 1836, the Webster-Ashburton Treaty; in 1845, the annexation of Texas; and in 1848, the Mexican Cession. Each of these acquisitions added a greater area to the national domain than was included in all of the thirteen original states.

During the period between 1776 and 1848 the rich farm lands of the Middle West were being opened up, railroads were reaching into the rich prairies, coal was coming into use, valuable minerals were being discovered, commerce was increasing, wealth was being accumulated and communication between different parts of the country was becoming easy. Waves of national pride were sweeping aside the ripples of sectional

prejudices and jealousies that had existed during the colonial period. The time was propitious for establishing national organizations.

There were other and more important reasons why 1848 was a favorable time for founding a general scientific society in the United States. Discoveries and generalizations of far-reaching importance had recently been made in several fields of science, and their significance was becoming known. In 1808 Dalton based his atomic theory on Proust's experimental proof that the law of multiple proportions prevails in chemical reactions. The synthesis of urea by Wöhler in 1829 was evidence that the laws of chemistry hold also in the organic field. Basic foundations for chemistry had been laid.

Lyell's "Principles of Geology," published in 1830-1833, had relieved geologists from the necessity of appealing to cataclysms and special creations to account for geological phenomena by proving that the existing geological agencies, acting slowly but relentlessly through long periods of time, were quite sufficient to produce all the great transformations of the surface of the earth that they had found.

During this period Michael Faraday, in England, and Joseph Henry, in the United States, by discovering and formulating the relations between electricity and magnetism, erected a scientific structure as beautiful and as satisfying to the mind as its applications have been important to the world.

It was in these decades, too, that the Cell Theory of the structure and functioning of living organisms had been formulated in papers by Schleiden and Schwann, and that von Humboldt, Darwin and Wallace had been exploring the life of the earth. Morse invented the electric telegraph in 1836, and Daguerre made his first photographs in 1839. Between 1842 and 1847 Long, Wells, Morton and Simpson introduced the use of ether, nitrous oxide and chloroform for producing anesthesia. In this triumphant atmosphere the Association was founded.

From the beginning the Association was successful. It held at least one meeting each year from 1848 to 1860 except in 1852, when the Cleveland meeting was cancelled because of an epidemic of yellow fever along the Ohio River, and two meetings in 1850 and 1851, all of which were well attended. Its membership was doubled. The spirit of confidence and elation which animated scientists is perhaps best illustrated in the addresses of the presidents of the period. The opening paragraph of the address of Benjamin

Peirce, a famous mathematician who was President of the Association in 1853, was as follows:

In most offices, the duties terminate with the office, and the thing of the past, the ex-officer, is to the present an unknown quantity. But it is not so with your President. Science, with its time-annihilating power, which gives life to the fossil, which hurries the embryo future into premature birth, which ventures beyond the grave even to the foot of the invisible throne, sternly drags forward its reluctant presidents to their hardest trial when they have ceased to be, to a judgment after death severer than that of Rhadamanthus. This calling out of the actor upon the stage after the night of performance, when the blood is no longer warm, is all the worse to him who has never before made a set speech, all whose habits of thought are unknown to aesthetic display, and the Arctic latitudes of whose frigid studies are impenetrable to the God of eloquence and to the Muses who vibrate the silver-toned chords of human sympathy.

In the concluding paragraphs of his address, James D. Dana, a distinguished geologist who was President of the Association in 1854, rose to heights of optimism that have not since been exceeded.

Another of our number has shown in eloquent language how the diversified features and productions of the Old World conspired to adapt it for the childhood and development of the race; and that, when beyond his pupilage, having accomplished his rescue from himself and the tyranny of forces around him, and broken the elements into his service, he needed to emerge from the trammels of the school-house in order to enjoy his fullest freedom of thought and action, and social union. Professor Guyot observes further, that America, ever free, was the appointed land for this freedom and union,—of which its open plains, and oneness of structure, were a fit emblem; and that, although long without signs of progress or hope in its future, this land is to be the centre of hope and light to the world.

In view of all these arrangements, man may well feel exalted. He is the last of the grand series. At his approach, the fierce tribes of the earth drew back, and the race dwindled to one fourth its bulk and ferocity,—the huge Mastodons, Lions and Hyenas yielding place to other species, better fit to be his attendants, and more in harmony with the new creation.

Partaking of the Divine image, all nature pays him tribute; the universe is his field of study; an eternity his future. Surely it is a high eminence on which he stands.

From these heights the Association sank low and almost died under the dark clouds of the Civil War. It held no meetings at all during the five years from 1861 to 1865.

Electrochemists to Meet at Nashville

The Eighty-first convention of the Electrochemical Society will be held in Nashville, Tenn., from April 15 to 18, 1942, with headquarters at the Hotel Hermitage. J. M. Breckenridge, of Vanderbilt University, is chairman of the Local

Committee. There will be four scientific-technical sessions, the first of which will be devoted to "Electric Furnace Reactions" and presided over by John D. Sullivan, of Battelle Memorial Institute. The second session on Friday morning will be devoted to "Electrochemical Research" and presided over by H. Jermain Creighton, of Swarthmore College. The following two sessions, one on Friday afternoon and one on Saturday morning, will be devoted to "Corrosion." The first session will consider the oxidation of various metals, including copper, iron and aluminum; the second session will be devoted to aqueous corrosion and protection. R. M. Burns, Assistant Director of Bell Telephone Laboratories, New York, will preside over the first session on corrosion and R. B. Mears, Research Engineer of the Aluminum Company, will preside over the second.—COLIN G. FINK, Secretary.

Spring Meeting of the Executive Committee

Ordinarily the Executive Committee of the Council holds two special meetings each year, one in the spring and one in the fall, in addition to sessions held during the period of the annual meeting. On March 15, 1942, the Executive Committee met in New York City with eight members present. The following items of general interest were among those that were approved:

1. Publication of a monthly A.A.A.S. BULLETIN, the subscription price to members to be included in their annual dues.
2. Election of Dr. Hugh S. Taylor, Princeton University, as Vice President and Chairman of the Section on Chemistry (C) for the calendar year 1942.
3. Election of Dr. Wade W. Oliver, Long Island College of Medicine, Brooklyn, New York, as Vice President and Chairman of the Section on Medical Sciences (N) for 1942.
4. Election of Dr. William A. Albrecht, University of Missouri, as Secretary of the Section on Agriculture (O) to fill the unexpired term of Dr. M. F. Morgan, Connecticut Agricultural Experiment Station, New Haven, Conn., who resigned in order to serve as an officer in the U. S. Infantry. Dr. Albrecht's term will expire at the close of the annual meeting for December-January 1944-1945.
5. Appointment of Dr. Sidney S. Negus, Medical College of Virginia, Richmond, as Director of the Press Service of the Association.
6. Request from the American Society of Plant Taxonomists for change in status from an associated society to an affiliated society. The

society is entitled to two representatives in the Association's Council, who will be *ex officio* members of the Section Committee of the Section on Botanical Sciences (G).

7. Affiliation of the Washington Academy of Sciences on the same basis as the affiliated state academies.

8. Request of the Linguistic Society of America for change in section affiliation from the Section on Historical and Philological Sciences (L) to the Section on Anthropology (H).

9. Publication of the Symposium on Relapsing Fever, organized and presented by the Section on Medical Sciences (N) at the Dallas Meeting.

Officers of the Association

Arthur H. Compton, *President*; The University of Chicago, Chicago, Ill.
 Forest R. Moulton, *Permanent Secretary*; Smithsonian Institution Building, Washington, D. C.
 Otis W. Caldwell, *General Secretary*; Boyce Thompson Institute, Yonkers, N. Y.
 Charles Carroll Morgan, *Treasurer*; Laidlaw and Company, Washington, D. C.
 Sam Woodley, *Assistant Secretary*; Smithsonian Institution Building, Washington, D. C.

Members of the Executive Committee

Burton E. Livingston, Riderwood, Md., *Chairman*.
 Arthur H. Compton, The University of Chicago, Chicago, Ill.
 Forest R. Moulton, Smithsonian Institution Building, Washington, D. C.
 Otis W. Caldwell, Boyce Thompson Institute, Yonkers, N. Y.
 Roger Adams, University of Illinois, Urbana, Ill.
 Joseph W. Barker, Columbia University, New York, N. Y.
 Walter B. Cannon, Harvard Medical School, Boston, Mass.
 J. McKeen Cattell, Science Press, Lancaster, Pa.
 Roy E. Clausen, University of California, Berkeley, Calif.
 Esmond R. Long, Henry Phipps Institute, Philadelphia, Pa.
 William E. Wrather, 4300 Overhill Drive, Dallas, Texas.

Vice Presidents and Secretaries of Sections

Mathematics (A)

Marshall H. Stone, Harvard University, Cambridge, Mass.
 Dunham Jackson, University of Minnesota, Minneapolis, Minn.

Physics (B)

Arthur J. Dempster, The University of Chicago, Chicago, Ill.

Henry A. Barton, 175 Fifth Avenue, New York, N. Y.

Chemistry (C)

Hugh S. Taylor, Princeton University, Princeton, N. J.

Neil E. Gordon, Central College, Fayette, Mo.

Astronomy (D)

Edwin F. Carpenter, University of Arizona, Tucson, Ariz.

Charles C. Wylie, University of Iowa, Iowa City, Iowa.

Geology and Geography (E)

Chester R. Longwell, Yale University, New Haven, Conn.

Allyn C. Swinnerton, Antioch College, Yellow Springs, Ohio.

Zoological Sciences (F)

Warder C. Allee, University of Chicago, Chicago, Ill.

James W. Buchanan, Northwestern University, Evanston, Ill.

Botanical Sciences (G)

John T. Buchholz, University of Illinois, Urbana, Ill.

George W. Martin, University of Iowa, Iowa City, Iowa.

Anthropology (H)

Leslie Spier, University of New Mexico, Albuquerque, N. Mex.

Wilton M. Krogman, The University of Chicago, Chicago, Ill.

Psychology (I)

Henry E. Garrett, Columbia University, New York, N. Y.

Arthur W. Melton, University of Missouri, Columbia, Mo.

Social and Economic Sciences (K)

Harold Hotelling, Columbia University, New York, N. Y.

Edward P. Hutchinson, 2032 Belmont Road, Washington, D. C.

Historical and Philological Sciences (L)

Morris R. Cohen, 475 W. 186th St., New York, N. Y.

Raymond J. Seeger, George Washington University, Washington, D. C.

Engineering (M)

Willis R. Woolrich, University of Texas, Austin, Texas.

George A. Stetson, 27 W. 39th St., New York, N. Y.

Medical Sciences (N)

Wade W. Oliver, Long Island College of Medicine, Brooklyn, N. Y.

Malcolm H. Soule, University of Michigan, Ann Arbor, Mich.

Paul C. Kitchin, Secretary, Subsection on Dentistry; Ohio State University, Columbus, Ohio.

Glenn L. Jenkins, Secretary, Subsection on Pharmacy; Purdue University, La Fayette, Ind.

Agriculture (O)

Andrew E. Murneek, University of Missouri, Columbia, Mo.

W. A. Albrecht, University of Missouri, Columbia, Mo.

Education (Q)

Harold F. Clark, Columbia University, New York, N. Y.

Hermann H. Remmers, Purdue University, La Fayette, Ind.

Symposia Publications

For many years the Association has sought to develop in its programs discussions of significant problems in particular scientific fields. An increasing number of joint sessions and other definitely organized programs have been worked out within recent years and they have met with general approval. Since so much interest was manifested in some of the symposia, it was decided to print, in full, the material that was presented. The volumes are 7 × 10½ inches, double column, illustrated, and cloth bound. In the list that follows, the prices quoted are for members and are fixed so as to cover as nearly as possible only the actual cost of printing and distribution.

Tuberculosis and Leprosy—The Mycobacterial Diseases. 133 pp.	\$2.50
Syphilis. 193 pp. (Out of print.)	2.50
Recent Advances in Surface Chemistry and Chemical Physics. 133 pp.	2.50
The Migration and Conservation of Salmon. 106 pp.	2.00
Mental Health. 470 pp.	3.50
Problems of Lake Biology. 142 pp.	2.00
The Gonococcus and Gonococcal Infection. 171 pp. (Out of print.)	2.50
The Genetics of Pathogenic Organisms. 90 pp.	2.00
Blood, Heart and Circulation. 339 pp.	3.00
The Cell and Protoplasm. 211 pp.	2.50
Human Malaria. 406 pp.	4.00
Leibig and After Leibig—A Century of Progress in Agricultural Chemistry. 119 pp.	2.50
Aerobiology. (In press.)	3.00
Relapsing Fever. (In press.)

